

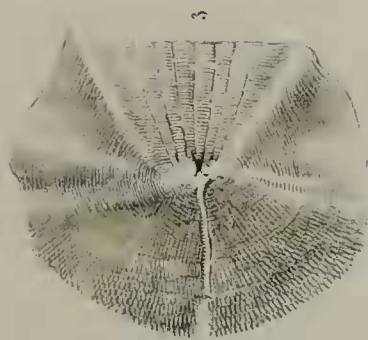
2. On the Characters of a Type of a Proposed new Genus of *Mugilidæ* inhabiting the Fresh Waters of Viti Levu, Feejee Group; with a brief Account of the Native Mode of capturing it. By JOHN DENIS MACDONALD, M.D., F.R.S., Staff-Surgeon, R.N.

(Plate I.)

The fish forming the subject of the present paper is found in abundance in the deeper parts of the Wai Mann, one of the tributaries of the Rewa River, *Na Viti Levu* (Large Feejee). An ordinary specimen would measure eighteen or twenty inches from the tip of the snout to the emargination of the tail, and five inches vertically at its deepest part. The native name, *Ika loa* (black fish), is derived from its colour, the head and upper part of the body being of a rich black, which gradually softens on the sides into a warm brown, growing paler and more silvery towards the white belly. My friend the Rev. Samuel Waterhouse, Wesleyan Missionary, who was with me when the first specimens were obtained, at once recognized the famous "Black Mullet"; but, in the absence of all works of reference, I was obliged to content myself with drawings and notes carefully taken on the spot. The more important characters of *Ika loa* are the following:—

Head thick, convex, and rounded above, but flattened and sucker-like beneath, where the lower jaw is circumscribed by a thin prominent border, angularly produced in front so as to occupy a corresponding median notch in the upper lip. The eye is of moderate size, with a yellowish-brown iris, the snout short and bluntly pointed, and the mouth protrusible to a considerable extent, with the cleft on each side reaching a line drawn perpendicularly through the centre of the orbit. The teeth of the upper jaw are minute, recurved, and disposed in a single series, interrupted, however, in front, where the lip presents the angular grooved space already noticed. Within the dental margin a crescentic palate-like membrane, with a transverse oval thickening in the middle, extends across the roof of the mouth. Behind this valvular membrane, and to the right and left of the mesial line, the vomer bears a small transverse zigzag row of teeth. In the lower jaw the teeth are arranged in a gently curved, villiform cluster on either side, with a wide median interval. A horseshoe-shaped series of delicate transverse sucker-like folds or plicæ corresponds with the contour of the mandible inferiorly, the fore part being very narrow, like an isthmus connecting the lateral portions, which gradually increase in breadth towards their posterior end. A similar structure is present in *Agonostoma plicatile*; but the lateral portions are not united anteriorly as in *Ika loa*. This difference evidently arises, in one case, from the angular projection of the mandible anteriorly, and, in the other, from its roundness at the corresponding part.

Operculum, inter-, and præoperculum scaly; gill-rays six on each



1 D. Macdonald au na. del.
2. Smith del.

GONOSTOMYXUS LOA-LOA.

